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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---|-------------|----------------------|---------------------|------------------|--|
| 10/584,834 | 06/27/2006 | Atsushi Kawasaki | 293013US3PCT | 3455 | |
| OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET | | | EXAMINER | | |
| | | | DEUBLE, MARK A | | |
| ALEXANDRIA, VA 22314 | | • | . ART UNIT | PAPER NUMBER | |
| | | | . 3651 | | |
| | | | | | |
| | | | NOTIFICATION DATE | DELIVERY MODE | |
| | | | 11/13/2007 | ELECTRONIC | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com oblonpat@oblon.com jgardner@oblon.com

| | | Application No. | Applicant(s) | | | |
|---|---|---|-------------------|--|--|--|
| Office Action Summary | | 10/584,834 | KAWASAKI, ATSUSHI | | | |
| | | Examiner | Art Unit | | | |
| | | Mark A. Deuble | 3651 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | • | • | | | | |
| 1) | Responsive to communication(s) filed on | | | | | |
| · · | | — s action is non-final. | | | | |
| <i>,</i> — | ,— | | | | | |
| , | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-15</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) | 5) Claim(s) is/are allowed. | | | | | |
| 6)⊠ | Claim(s) 1-7 and 10-15 is/are rejected. | | | | | |
| 7)🖂 | Claim(s) 8 and 9 is/are objected to. | • | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Applicati | on Papers | | | | | |
| 9) 🔲 🤈 | The specification is objected to by the Examine | er. | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | |
| | Applicant may not request that any objection to the | drawing(s) be held in abeyance. See | e 37 CFR 1.85(a). | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: | | | | | | |
| Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | • | | | |
| Attachment(s) | | | | | | |
| | e of References Cited (PTO-892) | 4) Interview Summary | (PTO-413) | | | |
| 3) 🛛 Inform | e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date <u>6/27/2006</u> . | Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 states that the heating means has a mold that is bonded to an upper surface of the handrail, however, it appears from the specification that when not in use, the mold of the heating means is not bonded to the upper surface of the handrail. This discrepancy between the specifications and claims renders the scope of the claim impossible to ascertain. It is recommended that the claim be amended to state that the mold is capable of bonding to an upper surface of the handrail.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-2, 4, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese document number 2000-16743.

The Japanese document shows a device for repairing a moving handrail of a passenger conveyor that includes a heating means for melting a surface portion of the handrail through

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heating. The heating means has a mold 16 bonded to an upper surface of the surface portion on an onward side of a path of the moving handrail, and an electric heater 19 for heating the mold. A cooling means 27 is provided for cooling the surface portion that has been melted through heating by the heating means. In operation, a target spot to be repaired of the surface portion is melted by the heated mold through heating and then the target spot is cured. Thus, the Japanese document shows all the structure required by claims 1-2 and 4 and all the steps required by claim 10.

5. Claims 1-3, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese document number 2001-039663

The Japanese document shows a device for repairing a moving handrail of a passenger conveyor that includes a heating means for melting a surface portion of the handrail through heating. The heating means has a mold 5 that could bond to an upper surface of the surface portion on an onward side of a path of the moving handrail, and an electric heater 6 for heating the mold. The heating means is held in place by fixing means 4 having a magnet portion magnetically adsorbed on a railing 8 supporting the moving handrail, for fixing the heating means to the railing. While this is unclear from the provided abstract, it is apparent from the provided PCT search report that such a magnetic fixing means is part of the fixing means 4. Finally, it should be noted that the heat transfer sheet 9 acts as a spaced on the surface of the handrail that maintains a predetermined gap between the heating means and the surface of the handrail.

Claim Rejections - 35 USC § 103

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- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 3, 11-12, and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese document number 2000-16743.

In regard to the magnetic fixing means of claim 3, it is recognized that no mounting means is shown for the device of the Japanese document, however, the use of a magnetic mounting means is deemed to have been an obvious choice for a mounting means because the use of magnets for mounting things on a metallic surface would be well known to any ordinary mechanic and it results in no unusual or unexpected results.

In regard to the limitations of claims 11 and 12, that the target spot is heated to a temperature of 180°C to 200°C along a linear portion of the path of the handrail, it is recognized that no temperature are discussed in the provided abstract, however, as this is the melting point of the thermoplastic handrails which the device is intended to be used with and as a temperature controlling thermostat 18 is provided in the device, heating to such a temperature would have been obvious to one of ordinary skill in the art. Furthermore, as the mold devices a linear surface, it defines a linear port of the moving handrail.

In regard to the limitations of claims 14-15, that the handrail is cased to run at a slower than normal running speed while the surface is heated, it is recognized that this is not disclosed in the provided abstract, however, as the device is adapted to be mounted on a moving handrail

so that the handrail may move therethrough, using the device on a slow moving handrail is deemed to have been an obvious design choice.

8. Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese document number 2000-16743 in view of Japanese document number 9-278340.

The Japanese document number 9-278348 teaches the use of a grinding means 13/4 for grinding down the surface of a moving handrail for cleaning and thus the use of such a grinding means in the device of Japanese document number 2000-16743 would have been obvious in view of this teaching.

9. Claims 6-7 are is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese document number 2000-16743 in view of Japanese document number 10-111276.

The Japanese document number 10-111276 teaches the use of spacer rollers 2 for rolling on the surface of a handrail to maintain a predetermined gap between a device 10 and the handrail. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to sue spacer wheels to keep the heating means of Japanese document number 2000-16743 at a predetermined spacing to the handrail.

Allowable Subject Matter

10. Claims 8-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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The prior art not discussed above show similar handrail repair devices to that of the present invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Deuble whose telephone number is (571) 272-6912. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene O. Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mark A. Deuble Primary Examiner Art Unit 3651

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